



# TE SERIES ANALOG MAGNETIC TAPE HEADS

### FEATURES:

- **UNIFORMITY:** *Track to track  $\pm \frac{1}{2}$  db.*
- **SHOCK RESISTANCE:** *Engineered to withstand 100 G's.*
- **OPERATING TEMPERATURE:** *From  $-55^{\circ}\text{F}$ . to  $+185^{\circ}\text{F}$ .*
- **MOUNTING:** *Any physical and mounting configuration.*
- **TRACK DENSITY:** *To 30 per inch.*
- **DESIGNED:** *To meet all applicable military specifications.*

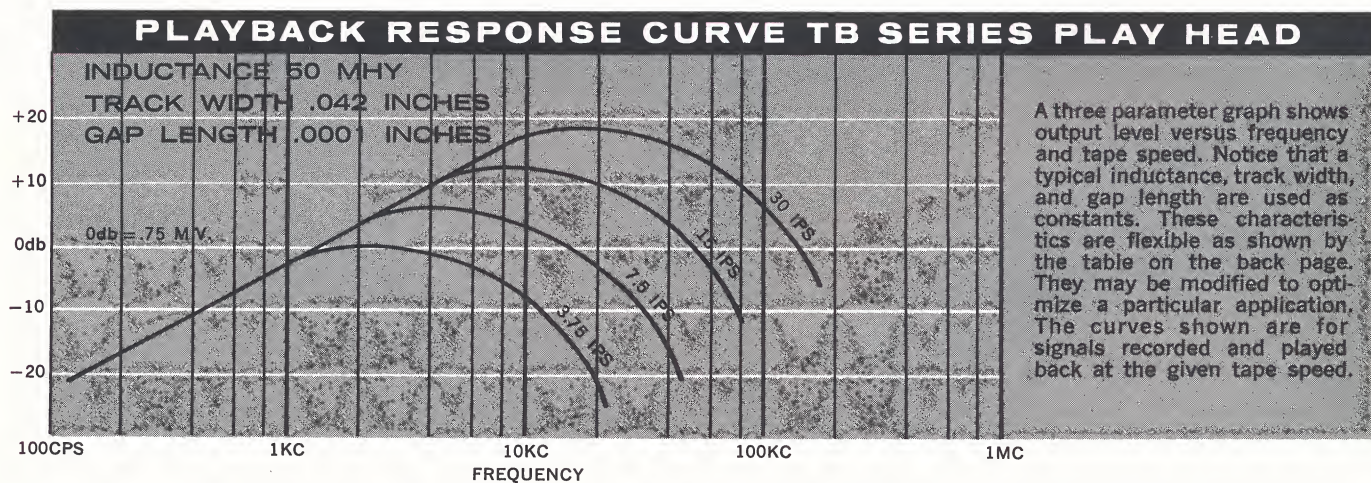





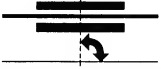

TE-20

20 tracks, 1" tape 150 mhy per track

Here is another in the series of Magnetic Analog Tape Heads designed and manufactured by the Magne-Head Division of General Instrument Corporation. The very tight track to track output uniformity available ( $\pm \frac{1}{2}$  db) will permit switching of the same record or play amplifier from track to track without changing record or bias current, frequency compensation or pre-emphasis. The high

track density allows a very efficient use of tape recording area and the track density may be increased by interlacing two or more heads. All metal, flush face construction provides longer tape life. Magne-Head has delivered more than 250 types of tape heads to meet varied requirements of military, and commercial applications.



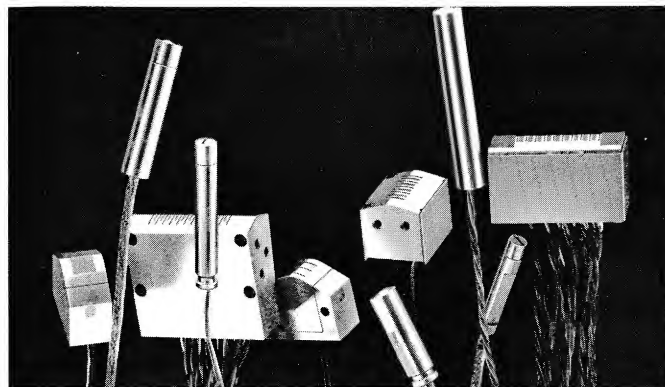
SPECIFICATIONS										
TE SERIES TRACKS PER INCH	7	8	9	10	12	14	15	16	18	20
TRACK WIDTH MAXIMUM-INCHES	.090	.090	.080	.070	.054	.042	.037	.032	.026	.020
TRACK PITCH INCHES	.140	.125	.111	.100	.083	.070	.068	.060	.056	.050
INDUCTANCE MAXIMUM-MILLIHENRIES	800	800	800	600	400	300	225	200	150	150
CROSSTALK MAXIMUM-DB	70	65	60	55	50	45	45	45	42	40
GAP LENGTH	 20 MICRO INCHES—MINIMUM									
RADIUS	 .125 INCHES—MINIMUM RECOMMENDED FOR REASONABLE HEADWEAR									
GAP SCATTER	 $\pm 50$ MICRO INCHES—STANDARD $\pm 25$ MICRO INCHES—AVAILABLE									
AZIMUTH	 $\pm 1$ MINUTE—STANDARD $\pm \frac{1}{3}$ MINUTE—AVAILABLE									
MOUNTING	 ANY									

## TE SERIES ANALOG MAGNETIC TAPE HEADS

Magne-Head is a proven leader in the design and manufacture of magnetic heads for all types of commercial and military applications. A program of continual research enables Magne-Head to offer you the latest developments both in performance standards and packaging design. Our engineers are available to work with you on any magnetic head problem—large or small—from prototype to production. Magne-Head has demonstrated capa-

bilities in design and production for such applications as a satellite-borne telemetry tape recorder, 56-channel in line read-after-write head for magnetic card random access computer memory, ship-board tactical data processing systems, aircraft audio pilot warning device, tape memory for stock exchange quotation device, and heads to operate in radio-active environment.

*FOR THE FULL STORY: write or call Magne-Head—area code 213-772-2351/TWX 910-325-6203*



- DRUM
- DISC
- DIGITAL TAPE
- CHARACTER RECOGNITION
- MAGNETIC CARDS



# M F Electronics Corp.

118 EAST 25th STREET, NEW YORK, N.Y., 10010—212 • OREGON 4-5360

## PRICE LIST

Effective November 1, 1966

### TRANSISTORIZED AUDIO TONE OSCILLATORS

#### Standard Units Base Price

Series Number	Description	*Single Frequency *Mixed Frequencies	<u>1-4</u>	<u>5-9</u> <u>10-24</u>	<u>10-24</u> <u>25-49</u>	<u>25-49</u> <u>50-99</u>	<u>50-99</u> <u>100 &amp; Up</u>	<u>100 &amp; Up</u>
101	12V. 5% Fixed		45.00	43.00	40.00	38.00	36.00	35.00
101A	28V. 5% Fixed		45.00	43.00	40.00	38.00	36.00	35.00
102	12V. 2% Fixed		48.00	46.00	43.00	41.00	39.00	38.00
102A	28V. 2% Fixed		48.00	46.00	43.00	41.00	39.00	38.00
103	12V. 1-1/2% Variable Frequency		47.00	45.00	42.00	40.00	38.00	37.00
103A	28V. 1-1/2% Variable Frequency		47.00	45.00	42.00	40.00	38.00	37.00
104	12V. 2-1/2% Variable Amplitude		48.00	46.00	43.00	41.00	39.00	38.00
104A	28V. 2-1/2% Variable Amplitude		48.00	46.00	43.00	41.00	39.00	38.00
105	12V. 1-1/2% Variable Frequency and Amplitude		49.00	47.00	44.00	42.00	40.00	39.00
105A	28V. 1-1/2% Variable Frequency and Amplitude		49.00	47.00	44.00	42.00	40.00	39.00
106	12V. 4% Fixed		48.00	46.00	43.00	41.00	39.00	38.00
106A	28V. 4% Fixed		48.00	46.00	43.00	41.00	39.00	38.00
107	12V. 2-1/2% Variable Frequency		47.00	45.00	42.00	40.00	38.00	37.00
107A	28V. 2-1/2% Variable Frequency		47.00	45.00	42.00	40.00	38.00	37.00
108	12V. 4% Variable Amplitude		48.00	46.00	43.00	41.00	39.00	38.00
108A	28V. 4% Variable Amplitude		48.00	46.00	43.00	41.00	39.00	38.00
109	12V. 2-1/2% Variable Frequency and Amplitude		49.00	47.00	44.00	42.00	40.00	39.00
109A	28V. 2-1/2% Variable Frequency and Amplitude		49.00	47.00	44.00	42.00	40.00	39.00
110	12V. 3% Variable Frequency and Amplitude		49.00	47.00	44.00	42.00	40.00	39.00
201	12V. 3/4% Fixed		80.00	73.00	69.00	66.00	64.00	62.00

#### Shockproof Units

##### "R" Series

For "R" Series, add the following prices to standard series base price.	*Single Frequency	<u>1-4</u>	<u>5-9</u>	<u>10-24</u>	<u>25-49</u>	<u>50-99</u>	<u>100 &amp; Up</u>
	*Mixed Frequencies		<u>10-24</u>	<u>25-49</u>	<u>50-99</u>	<u>100 &amp; Up</u>	
		25.00	20.00	18.00	16.00	15.00	14.00

#### Shockproof Units

##### "S" Series

For "S" Series, add the following prices to standard series base price.	*Single Frequency	<u>1-4</u>	<u>5-9</u>	<u>10-24</u>	<u>25-49</u>	<u>50-99</u>	<u>100 &amp; Up</u>
	*Mixed Frequencies		<u>10-24</u>	<u>25-49</u>	<u>50-99</u>	<u>100 &amp; Up</u>	
		30.00	24.00	21.00	18.00	17.00	16.00

\*Prices are shown for single frequency quantity and mixed frequency quantity, in the frequency range 400 Hz to 30 kHz. For other frequencies, the following applies:

Frequency	Add to base price
20.0 Hz to 49.9 Hz	20%
50.0 Hz to 399 Hz	10%
400 Hz to 30.0 kHz	0
30.1 kHz to 80.0 kHz	10%
80.1 kHz to 120 kHz	20%

To order, specify series, frequency and noval plug, if desired. See Audio Tone Oscillator brochure for wiring connections and details.

This list supersedes all previous price lists.

Terms: 1/2% 10 days, net 30 days.

All prices F.O.B. our plant New York, New York





# MF Electronics Corp.

118 EAST 25th STREET, NEW YORK, N.Y., 10010—212 • OREGON 4-5360

## P R I C E L I S T

Effective November 1, 1966

### Special Sine Wave Oscillators

Series Number	Description	1-9	10-24	25-49	50-99	100 & Up
202A	Constant Output (400 cps to 30 KC)	110.00	90.00	85.00	83.00	80.00
220AM	High Reliability (400 cps to 10.5 KC)	300.00	275.00	250.00	245.00	235.00

Series Number	Description	1-9	10-24	25-49	50-99	100-499	500-999	1000
P	1% Variable Frequency (10 cps to 30 KC)	49.00	45.00	40.00	37.50	35.00	30.00	27.50
P	1% Variable Frequency (10 cps to 30 KC) Mixed Frequencies			45.00	41.00	37.50	32.50	29.50

### Crystal Oscillators, 3.5 to 85 kHz, Field Repairable, Modular Construction

Series Number	Description	Single Frequency	1	2-4	5-9	10-24	25-49	50-99	100 & Up
		Mixed Frequencies		5-9	10-24	25-49	50-99	100 & Up	
401	Minus 28V. Supply, Adjustable Output, 0.01% Accuracy		165.00	155.00	145.00	140.00	135.00	132.00	130.00
401A	Plus 28V. Supply, Adjustable Output, 0.01% Accuracy		165.00	155.00	145.00	140.00	135.00	132.00	130.00
402	Minus 28V. Supply, Fixed Output, 0.01% Accuracy		160.00	150.00	140.00	135.00	130.00	128.00	126.00
402A	Plus 28V. Supply, Fixed Output, 0.01% Accuracy		160.00	150.00	140.00	140.00	130.00	128.00	126.00
403A	Plus 28V. Supply, Adjustable Output, 0.01% Accuracy, Gated Output		180.00	170.00	160.00	150.00	145.00	140.00	138.00

### Voltage Controlled Oscillators and Demodulators

Series Number	Description	1-4	5-9	10-24	25-49	50 & Up
310-1	2500 Hz AC VCO (Modulator)	45.00	42.50	40.00	37.50	35.00
410-1	2500 Hz AC Demodulator	75.00	70.00	65.00	62.50	60.00
300	-28V. 400 Hz to 20 kHz VCO; MIL-E-16400; ± Voltage/Frequency Deviation	265.00	250.00	Consult factory for higher quantity prices.		
300A	+28V; 400 Hz to 20 kHz VCO; MIL-E-16400; ± Voltage/Frequency Deviation	265.00	250.00	Consult factory for higher quantity prices.		
301	-28V; 400 Hz to 20 kHz VCO; MIL-E-16400; + (only) Voltage/Frequency Deviation	265.00	250.00	Consult factory for higher quantity prices.		
301A	+28V; 400 Hz to 20 kHz VCO; MIL-E-16400; - (only) Voltage/Frequency Deviation	265.00	250.00	Consult factory for higher quantity prices.		

To order, please specify series and frequency.

This list supersedes all previous price lists.

Terms: 1/2% 10 days, net 30 days.

All prices F. O. B. our plant New York, New York